



# False River Ecosystem Restoration Status Update and Alternative Action Plan May 30, 2012

# HCR 168 of 2011 Regular Legislative Session

- Requested the Louisiana Department of Natural Resources (DNR), in conjunction with the Pointe Coupee Parish Policy Jury, to assume the role of lead local project sponsor for the “False River Aquatic Resources Ecosystem Restoration Project” and to coordinate other state agencies, local governmental agencies, and stakeholder groups in order to help expedite the efforts by the United States Army Corps of Engineers (USACE) to restore the False River ecosystem.
- Directed DNR to seek input and advice from other state agencies, to assist the USACE as it conducts the study of the False River ecosystem and provide assistance and support for the implementation of the restoration plans recommended in the report to be issued by the Corps in 2012

# HCR 168 of 2011

## Regular Legislative Session

ENROLLED

Regular Session, 2011

HOUSE CONCURRENT RESOLUTION NO. 168

BY REPRESENTATIVE THIBAUT

### A CONCURRENT RESOLUTION

To urge and request the Department of Natural Resources, in conjunction with the Pointe Coupee Parish Police Jury, to assume the role of lead local project sponsor for the False River Aquatic Resources Ecosystem Restoration Project.

WHEREAS, False River, an oxbow lake formed from a bend in the Mississippi River is located in Pointe Coupee Parish; and

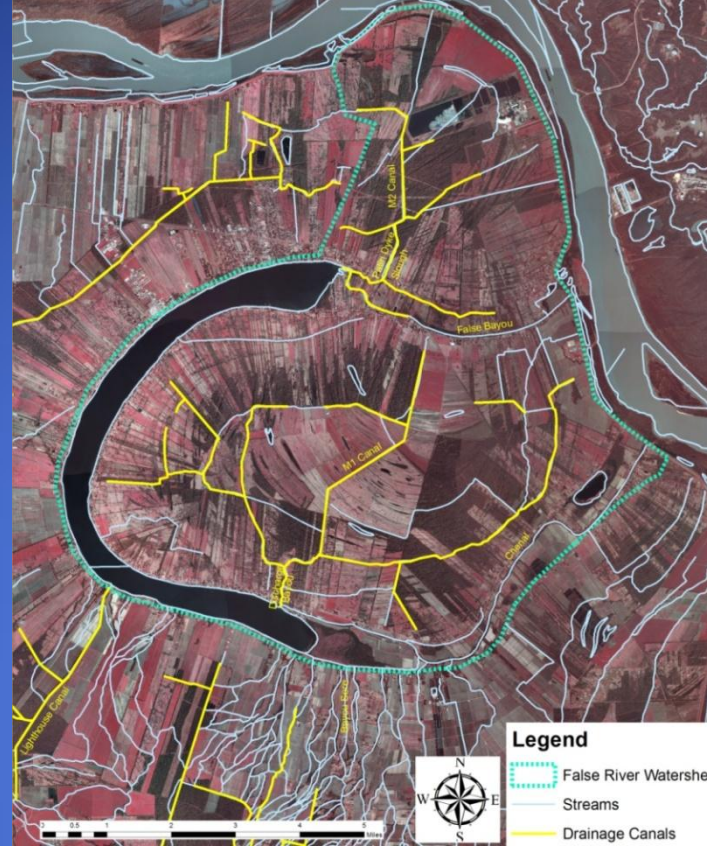
WHEREAS, False River, a lake well known for its natural scenic beauty, is an important natural resource that supports an abundance of recreational activities, including fishing, swimming, waterskiing, boating, birding, and waterfowl hunting; and

WHEREAS, these scenic and recreational opportunities are critical components necessary to the economic well-being of the region surrounding the lake and, indeed, to the state as a whole; and

WHEREAS, water quality issues arising from a variety of causes, including increased runoff from the development of the surrounding land, increased discharge of wastewater as a result of that increased development, and the sediment and nutrient content of runoff from agricultural development including an estimated twenty-eight thousand tons of silt deposited annually into the lake, have impacted and continue to threaten and degrade the value of this valuable resource and the economic activity that is dependent upon the lake; and

WHEREAS, in an effort to address these issues, in 2001, the United States Army Corps of Engineers began the "False River Aquatic Resources Ecosystem Restoration Project" which ". . . would enhance and restore the False River ecosystem by enhancing fisheries and wildlife habitat, addressing sedimentation and associated water quality issues in False River. . ."; and





# False River Watershed Interim Report on HCR 168 of 2011 Regular Legislative Session

[http://dnr.louisiana.gov/index.cfm?md=pag  
ebuilder&tmp=home&pid=924](http://dnr.louisiana.gov/index.cfm?md=pag<br/>ebuilder&tmp=home&pid=924)

# Historical Situation/Issues

- False River was a prime fishing lake with abundant aquatic vegetation and fish habitat - has experienced a noticeable decline in species diversity
- M-1 and M-2 Canal Systems constructed by USDA Soil Conservation Service from 1970's to early 1980's to provide improved drainage of the watershed despite concerns raised by LDWF and USFWS in 1975
- Forestland within the False River watershed converted to cropland in the 1980's after completion of canal construction
- Also resulted in sedimentation of the North and South Flats
- Also resulted in declining aquatic environment and fisheries quality in False River

# Historical Situation/Issues (continued)

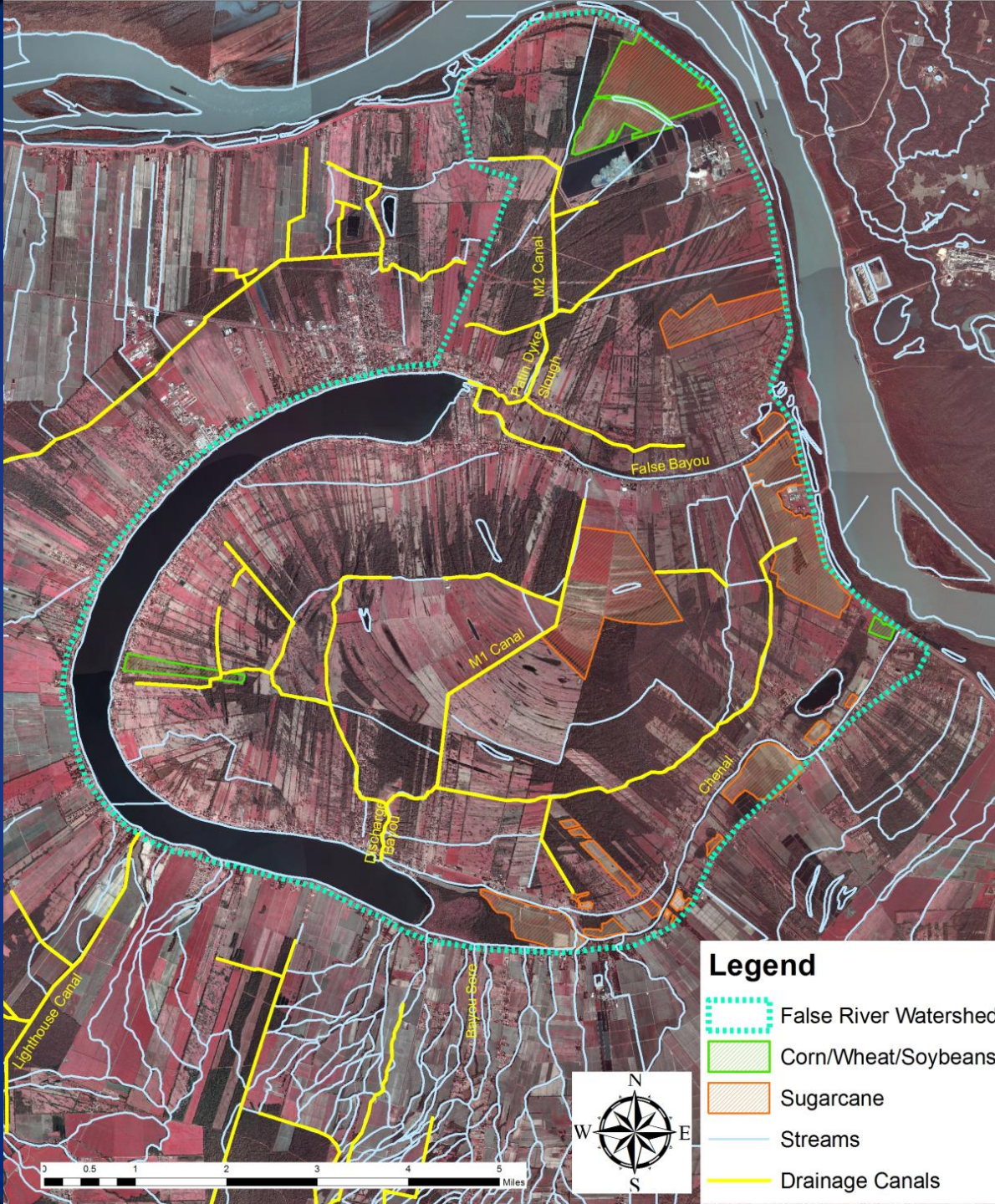
- Modification of False River shoreline also eliminated fish habitat
- Adjustment of Lighthouse Canal Control Structure in 1993 led to water level stabilization at 16' msl where it remains today – improved navigation in areas of sediment deposition
- U.S. Army Corps of Engineers begins False River Ecosystem Restoration Study in 2001
- Corps study remains incomplete due to lack of funding (May 2012) and federal funding would have to be secured for the construction of the recommended remedy once report is completed and approved

# Options

- No Action
- Wait on U.S. Army Corps of Engineers to complete study, obtain funding and construct recommended remedy
- Implement alternative actions that will improve conditions, address stakeholder concerns, expedite restoration and advance sustainability



# False River and The Island





# Remediation Performed

- Much of cropland in the False River watershed converted to pasture (1990's) (approximately 13,700 acres)
- Aquatic vegetation plantings conducted by LDWF (2000)
- Actions taken to reduce bacterial issues in lake (1998-2010)
- Fencing and channel stabilization work being done along the M-1 and M-2 Canal Systems by NRCS and Police Jury (2005-ongoing)
- Sediment trap constructed by SCS in 1981 now being maintained by Police Jury (2006 - ongoing)

# False River Island – Sediment Control





# Bank Erosion Issues

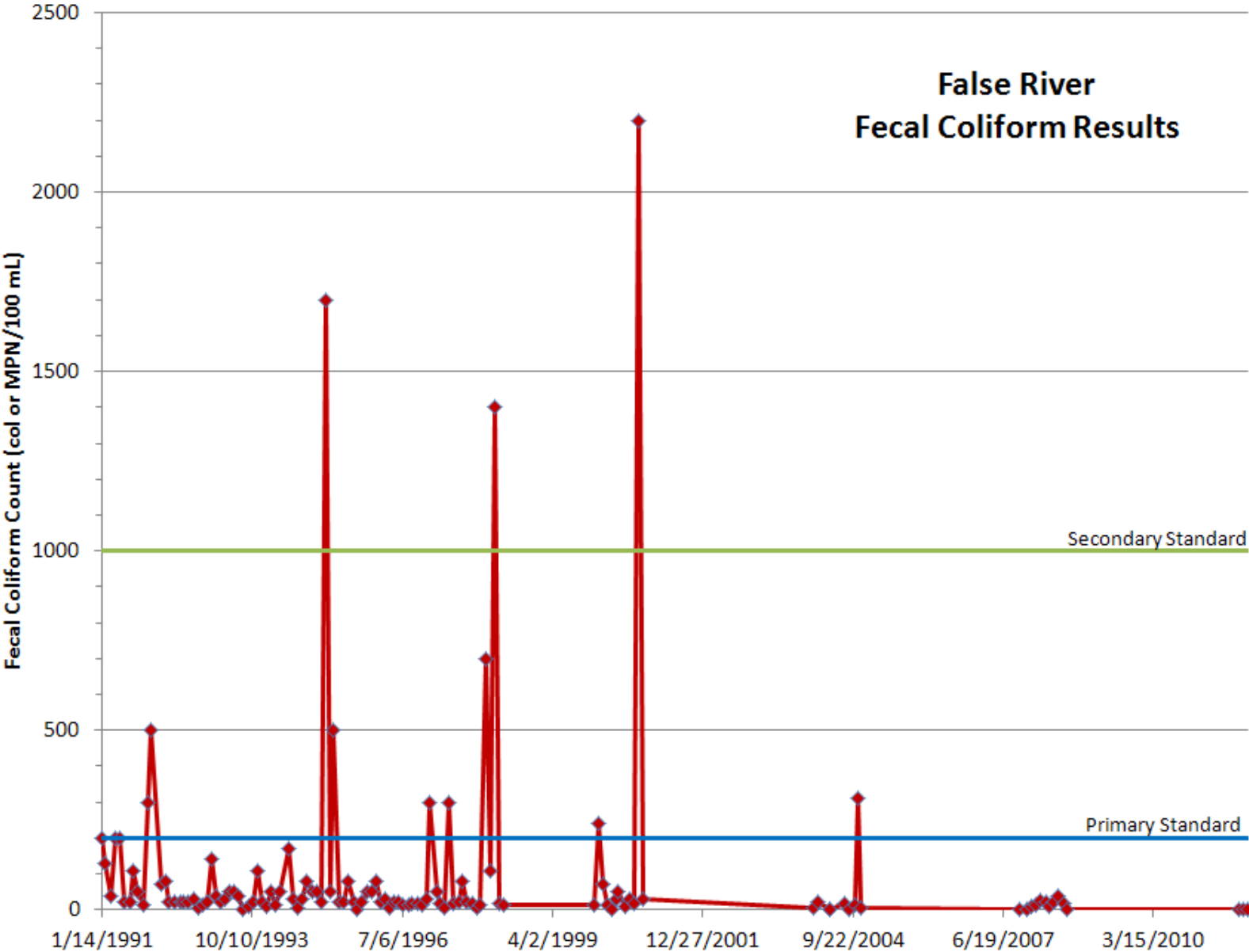




# Fencing and Bank Stabilization



# False River Fecal Coliform Results



# Other Actions

- Discussion of a proposed 6' lake drawdown by LDWF and USACE (2010-2011)
- 15 acre plot of Southern Naiad vegetation mapped by LDWF in South Flats (Fall - 2011)
- LDWF updates False River Management Plan (January 2012)
- Private party proposes to construct mitigation bank in the Island watershed (2012)
- LDWF proposes to reopen Commercial Gill Netting (February 2012)



# Unsolved Problems

- Although reduced, sediment still introduced into system
- False River exhibits elevated turbidity during storm events due to runoff and winds and during times of high boat traffic – some areas much shallower due to siltation
- False River fisheries: overall decline in sport fish
- False River aquatic vegetation: shoreline and spawning ground vegetation in decline throughout lake
- Fish habitat is in a state of decline due largely to siltation, turbidity and shoreline modifications
- Long term conservation and management plan for False River watershed is needed



# South Flats Sedimentation

February 2010



# North Flats Sedimentation



February 2010



# Alternative Action Plan Goals:

1. Take actions to initiate improvement of the False River aquatic ecosystem and expedite restoration while considering concerns of stakeholders.
2. Advance sustainability of the resource.
3. Identify participating agencies and stakeholders.
4. Identify funding mechanisms and estimate costs.
5. Establish schedule for work to be performed.

# Potential Funding Mechanisms

- Local:
  - Pointe Coupee Parish Police Jury
  - City of New Roads
  - Local Organizations
- State:
  - Capital Outlay\*
  - LDEQ (USEPA Section 319 Program in Louisiana)\*\*
  - LDWF (USFWS Sport Fish Restoration Act Program in Louisiana)\*\*
  - LDEQ (Beneficial Environmental Project Nomination)

\* 25% Local Match May be Required

\*\*State match may be required for Federal funding

# Potential Funding Mechanisms (cont'd)

- Federal:
  - Corps of Engineers Section 206 Program
  - USEPA Section 319
  - USFWS Sport Fish Restoration Act Program
  - USDA/NRCS EQIP Program, other landowner incentives
- Examples of NGOs and Other Donors:
  - Ducks Unlimited
  - The Nature Conservancy
  - Louisiana B.A.S.S. Federation
  - Apache Corporation tree planting program
  - Camp/Home Owners
  - Other donors (industrial, commercial, individual, community organizations)



# Current Funding Status

- Local:
  - Pointe Coupee Parish Police Jury – in kind contribution related to sediment trap maintenance and channel stabilization
  - Match for Capital Outlay as required
- State:
  - 2011 Capital Outlay - \$50,000
  - 2012 Capital Outlay
    - \$500,000 Priority 2 requires legislative and bond commission approval
    - \$2.2 million Priority 5
  - LDWF – False River management funds contained in operating budget (sampling, stocking, etc)

## Federal:

- 2013 NRCS EQIP Funds for channel stabilization

# False River Alternative Action Plan

## **Short-term:**

- Channel and sediment basin maintenance
- Watershed drainage network assessment
- Habitat Improvement
- Fisheries Evaluation and Stocking
- Commercial Fishing Season
- Monitor Exotic, Invasive and other Undesirable Fish Species

## **Mid-term:**

- Lake Monitoring/Water Quality Survey
- Drainage Network Hydro-modification
- Lake Level Management
- Creation of Island/Terrace Habitat

## **Long-term:**

- Watershed Management Plan (HCR-123 of 2012)

## **Unknown:**

- Expansion of Area Sewer System
- Corps Ecosystem Restoration Implementation

# *Short-term: Channel and Sediment Basin Maintenance*

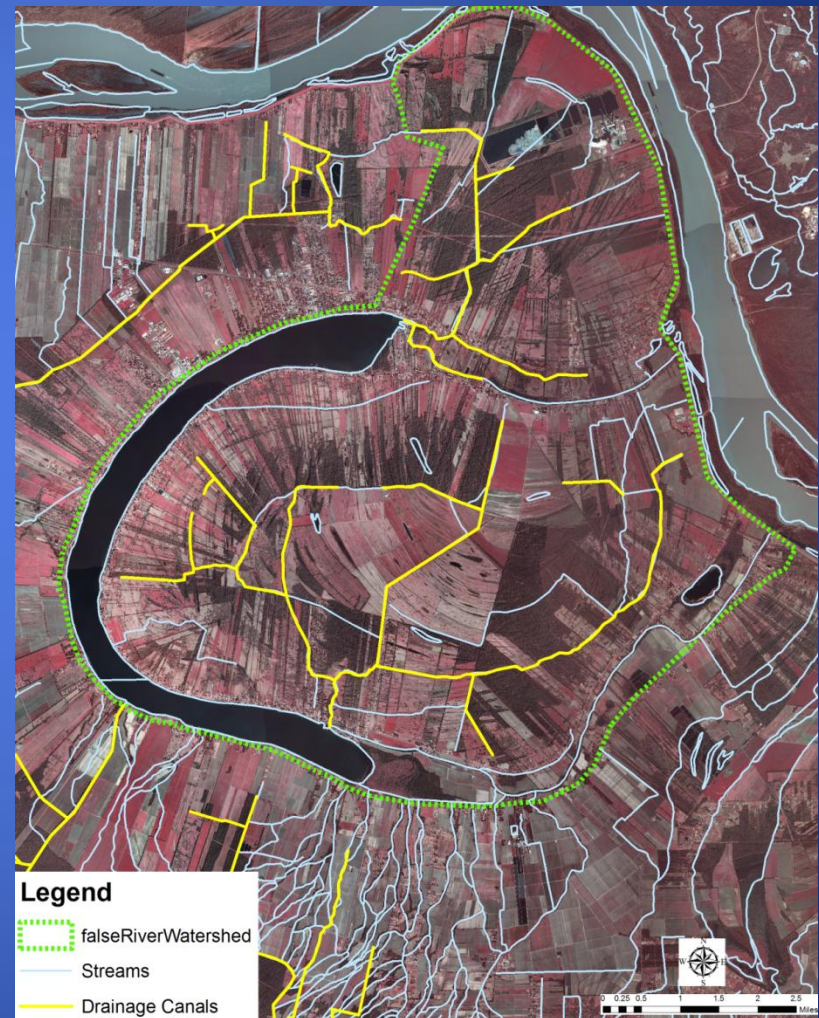
- Actions: Implement routine cleaning of sediment traps and continued improvements to reduce erosion and sediment runoff into False River. Establish routine maintenance and inspection of False River's drainage network.
- Potential Funding Sources: PCPJ and NRCS
- Estimated Cost/Status: \$30-\$35,000; approximately 1,000 feet of additional fencing is needed along the M-1 Canal (2013 NRCS Funding)





# Short-term: Watershed Drainage Network Assessment

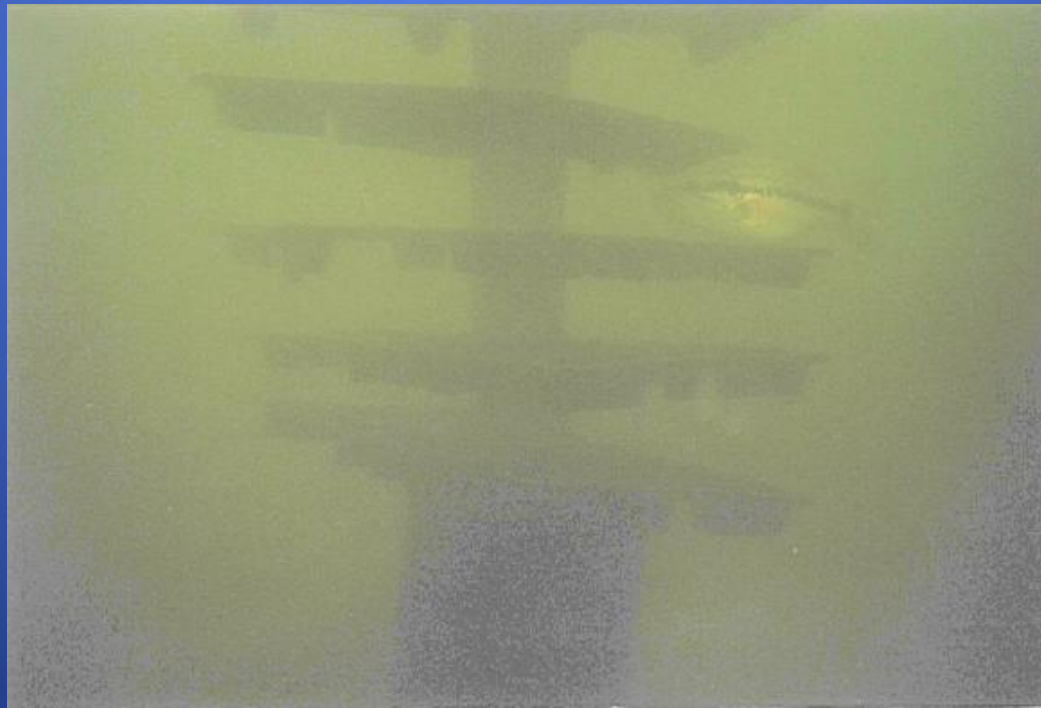
- Action: Determine the current degree of ongoing lake sedimentation and turbidity.
- Potential Funding Source: LDNR Capital Outlay (FY2011)
- Lead Agencies: LDNR, LDEQ, LDWF, PCPJ and NRCS
- Estimated Cost/Status: \$50,000 (funding currently available through FY2011 Capital Outlay to LDNR)



# *Short-term: Habitat Improvement*

- Actions: Develop and implement artificial reef, spawning bed and vegetative planting projects to improve fish habitat. Work with local sponsors to secure funds, materials and labor (artificial reef, spawning beds and native aquatic vegetation).
- Potential Funding Sources: Capital Outlay, PCPJ, LDWF, grants, donations and volunteers
- Lead Agencies: LDWF, PCPJ, LDNR, and local groups
- Estimated Cost/Status: \$80,000 (utilize portion of FY2012 Capital Outlay that is currently in House Bill 2 along with any local match and private donations)







# Short-term:

## *Fisheries Evaluation and Stocking*

- Actions: Sampling of fish populations to evaluate the condition of the stock and consideration of harvest regulation and stocking. The next planned stocking of False River scheduled for May 2013 (Hybrid Striped Bass).
- Potential Funding Source: LDWF
- Lead Agency: LDWF
- Estimated Cost/Status: varies annually/part of ongoing efforts by LDWF – funded annually in LDWF budget



# *Short-term: Commercial Fishing Season*

- Action: Lift the commercial gill netting ban and implement a special season from November 1 to the end of February each year. Minimum mesh size for commercial gill nets and trammel nets set at 3.5" (the larger mesh is used to help exclude gamefish). Takes advantage of commercial fisheries while protecting sport fisheries.
- Potential Funding Source: Not Applicable
- Lead Agency: LDWF



# *Short-term: Monitor Exotic, Invasive and other Undesirable Fish Species*

- Actions: Monitor grass carp populations and other herbivores in the lake to assist with aquatic planting strategies as well as commercial and recreational fishing regulations and seasons.
- Potential Funding Source: LDWF
- Lead Agency: LDWF
- Estimated Cost/Status: varies annually/part of ongoing efforts by LDWF – funded annually in LDWF budget





# *Mid-term: Lake Monitoring/Water Quality Survey*

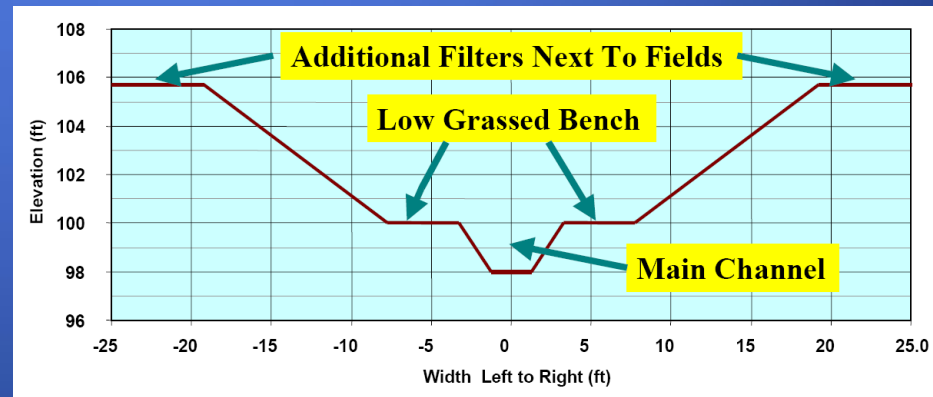
- Actions: Develop and implement a protocol for a water quality monitoring (i.e. limnological) survey of the lake to determine overall health of the lake and establish baseline for lake management actions.
- Potential Funding Sources: LDWF and LDEQ
- Lead agency: LDWF and LDEQ
- Estimated cost: varies annually/water quality monitoring part of ongoing efforts – funded annually in LDWF budget – additional funding necessary to perform more detailed analysis



# Mid-term:

## Drainage Network Hydromodification

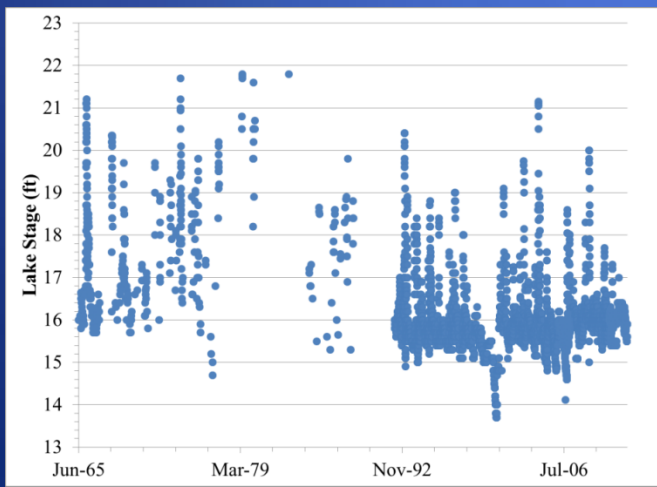
- Actions: Modify drainage network to slow storm flow and increase the sediment retention to reduce siltation and turbidity in the lake.
- Potential Funding Sources: PCPJ, NRCS, USEPA/LDEQ 319 Grant, Capital Outlay
- Lead Agencies: PCPJ, NRCS, LDNR, LDEQ and LDWF
- Estimated Cost/Status: FY2012 Capital Outlay that is currently in House Bill 2 Priority 5 may be utilized once moved to Priority 1 or 2 along with local match as required.



# Mid-term:

## Lake Level Management

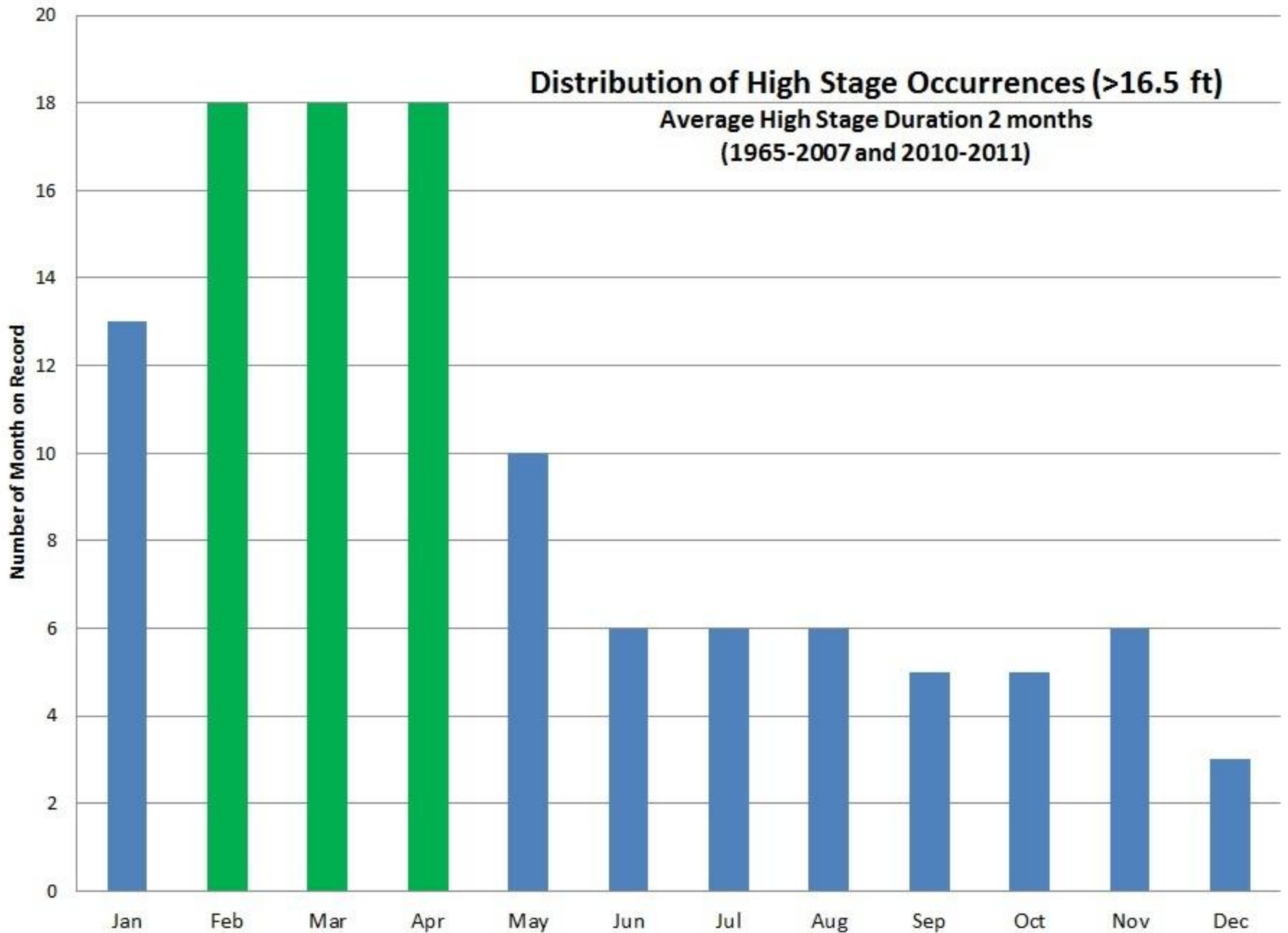
- Action: A 2 to 3-foot water level adjustment between mid-September and mid-January would reduce the construction cost of terraces in the South Flats, reduce turbidity and improve water quality, promote vegetative growth, facilitate the placement of edge habitat, and thereby improve fisheries.
- Potential Funding Source: PCPJ
- Lead Agencies: PCPJ, LDWF, LDOTD and LDNR





## Distribution of High Stage Occurrences (>16.5 ft)

Average High Stage Duration 2 months  
(1965-2007 and 2010-2011)

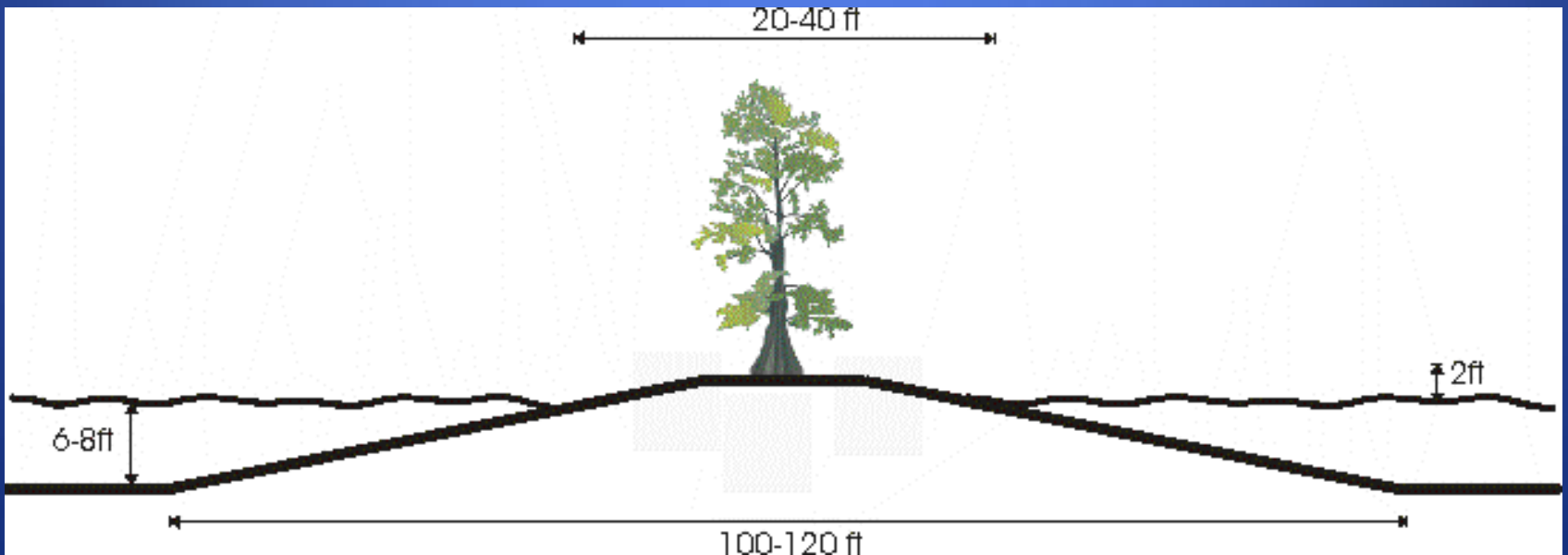


# *Mid-term: Creation of Island/Terrace Habitat*

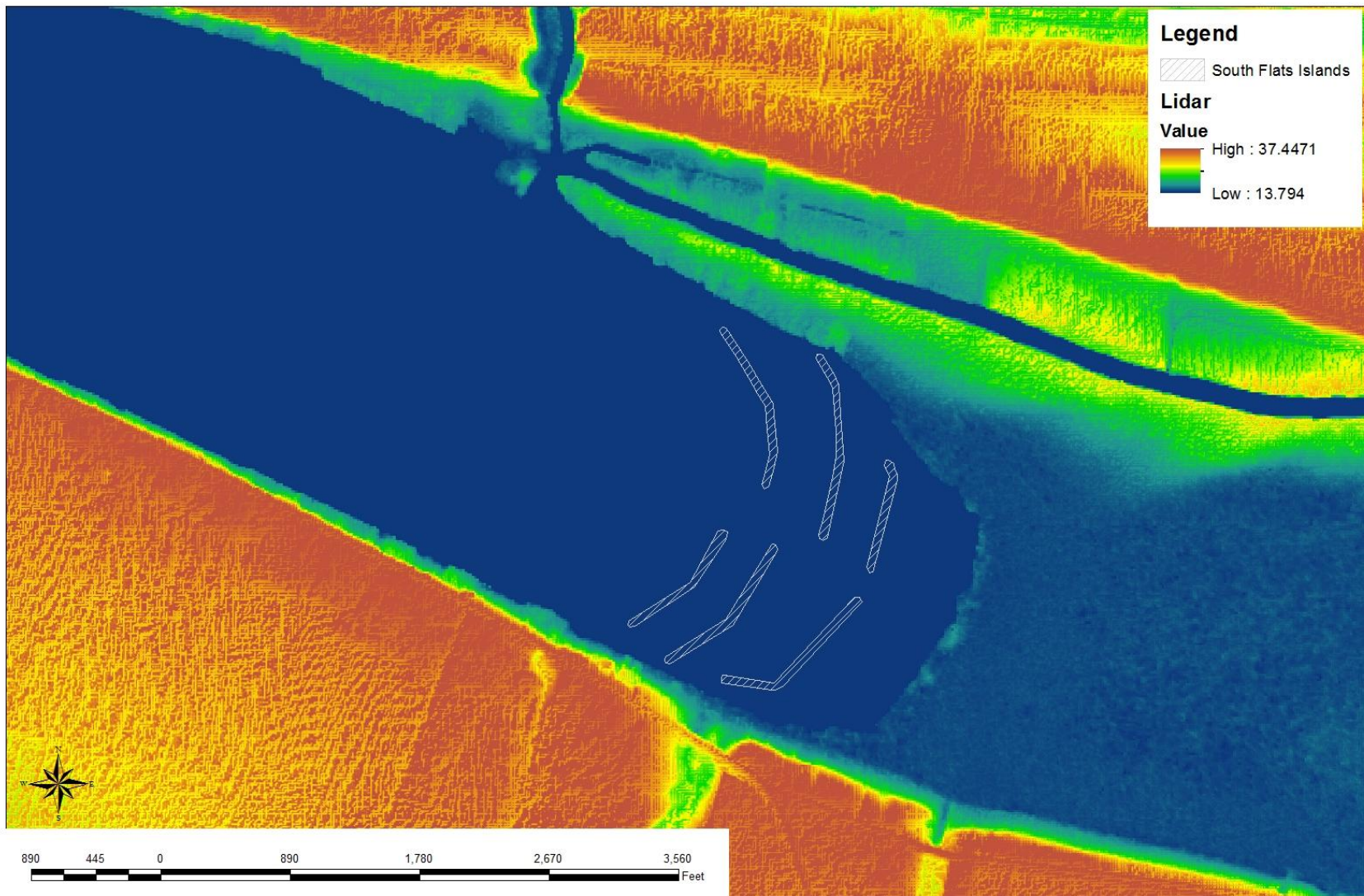
- Actions: Creation of islands/terraces in South Flats to improve fish and wildlife habitat, wave attenuation, water temperature cooling, turbidity reduction, navigation, and water quality. Construction can be scheduled in one or two events based upon an estimate of funding that may become available.
- Funding Sources: utilize portion of FY2012 Capital Outlay that is currently in House Bill 2 - Priority 2 and 5 along with any local match required.

# Island/Terraces

- Approximately 5,500 ft. of island/terrace
- Slope 5:1
- Crest 20-40 wide extending two feet above 16' lake level
- Distance between island/terrace crest app. 300-600 ft.
- Distance from shoreline with piers to crest app. 300-600 ft



# Conceptual South Flat Island/Terraces





# Typical Island/Terraces



# Mid-term: Creation of Island/Terrace Habitat

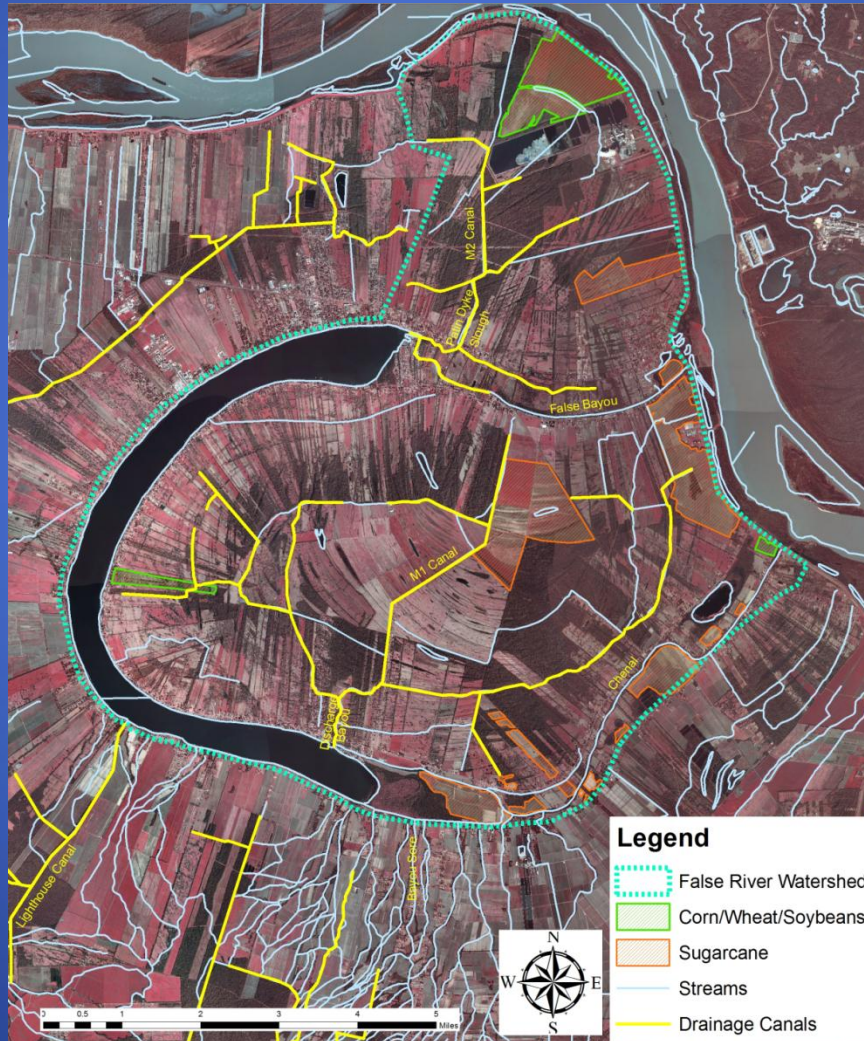
- Lead Agencies: PCPJ, LDNR and LDWF.
- Estimated Cost/Status:
  - One year construction:

Year	Lake Level Management		Scope
	With	Without	
1	\$943,000	\$1,462,000	6-8 islands/terraces

- Two year construction:

Year	Lake Level Management		Scope
	With	Without	
1	\$361,000	\$437,000	2-3 islands/terraces
2	\$723,000	\$1,176,000	3-6 islands/terraces
Total	\$1,084,000	\$1,613,000	

# Long-Term: Watershed Management Plan



# *Long-Term:*

## *Watershed Management Plan*

- Actions: Develop and implement a long-term conservation and watershed management strategy, establishing best management practices, a watershed conservation plan and investigating the acquisition of conservation easements. This would provide for long-term reduction of sediment and ensure sustainability of the resource.
- Funding Sources: NRCS, Capital Outlay and PCPJ.
- Lead Agencies: PCPJ, NRCS, LDWF and LDNR.
- Estimated Cost/Status: Unknown - utilize volunteers and agency staff (False River Watershed Council HCR 123) to develop and drive implementation.



# HCR 123 of 2012

## Regular Legislative Session: False River Watershed Council

HLS 12RS-2911

ORIGINAL

Regular Session, 2012

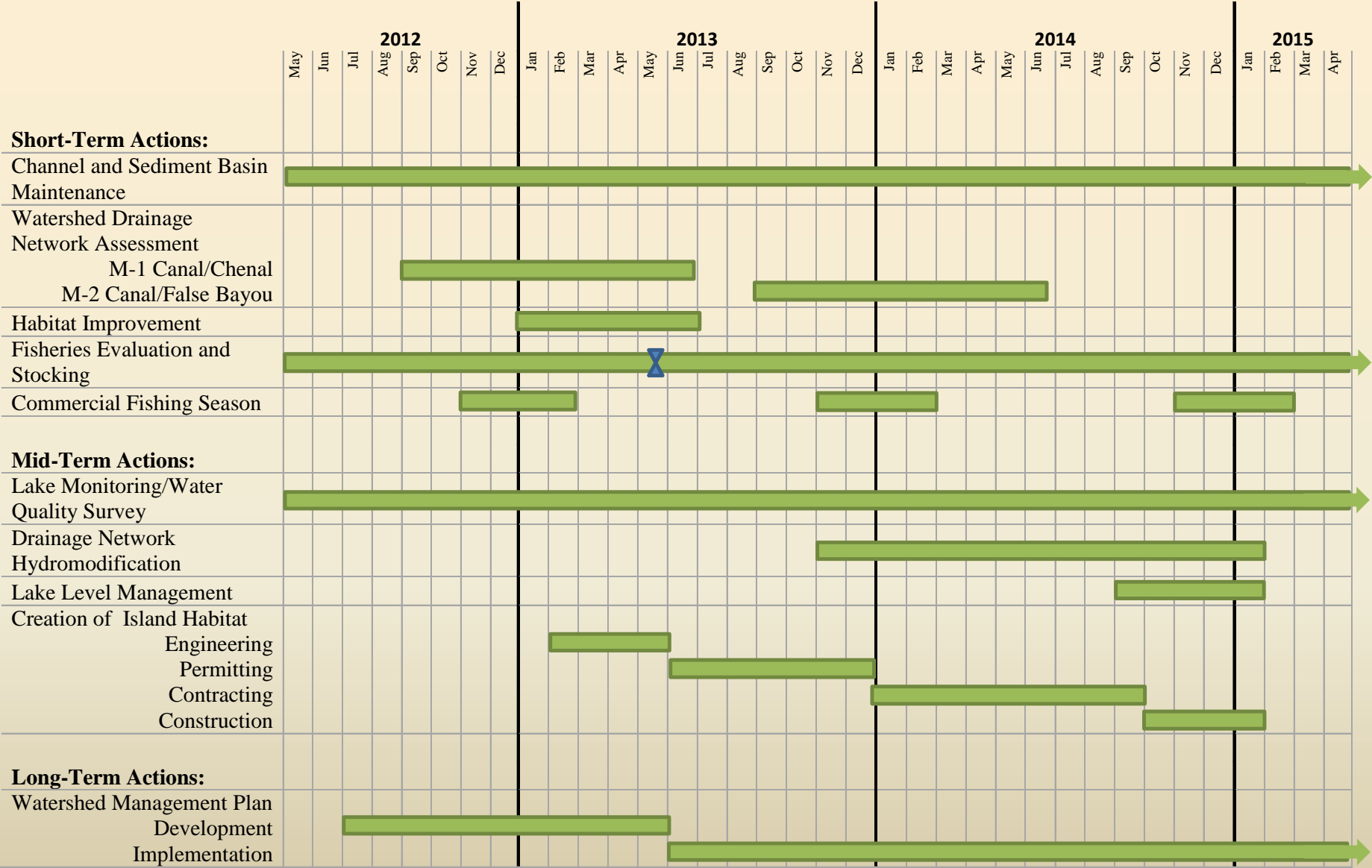
HOUSE CONCURRENT RESOLUTION NO. 123

BY REPRESENTATIVE THIBAUT

WATER/RESOURCES: Creates the False River Watershed Council

1 A CONCURRENT RESOLUTION  
2 To establish the False River Watershed Council and to provide for its membership and  
3 responsibilities.  
4 WHEREAS, False River, an oxbow lake formed from a bend in the Mississippi  
5 River, is located in Pointe Coupee Parish; and  
6 WHEREAS, False River, a lake well known for its natural scenic beauty and for the  
7 fact that it is an important natural resource that supports an abundance of recreational  
8 activities, including fishing, swimming, waterskiing, boating, birding, and waterfowl  
9 hunting; and  
10 WHEREAS, these scenic and recreational opportunities are critical components  
11 necessary to the economic well-being of the region surrounding the lake and, indeed, to the  
12 state as a whole; and  
13 WHEREAS, Article IX, Section 1 of the Constitution of Louisiana declares that the  
14 "natural resources of the state, including ... water ... shall be protected, conserved, and  
15 replenished insofar as possible and consistent with the health, safety, and welfare of the  
16 people. The Legislature shall enact laws to implement this policy"; and  
17 WHEREAS, the aquatic habitat of False River has been in a state of decline due to  
18 a variety of causes, including increased runoff from the development of the surrounding  
19 land, shoreline modifications and development, and the sediment and nutrient content of  
20 runoff from agricultural development, runoff that at its peak resulted in tens of thousand tons  
21 of silt being deposited annually into the lake; and

# Proposed Action Plan Implementation Schedule



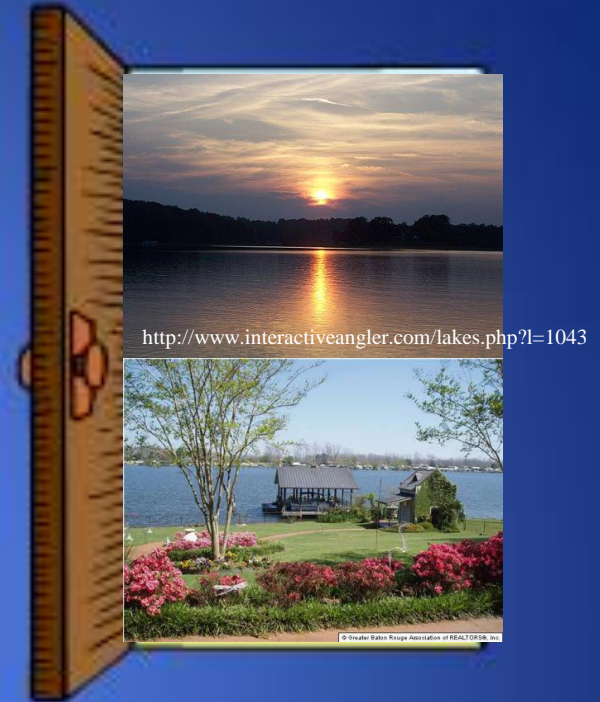
# FALSE RIVER CHOICES



DOOR # 1  
DO  
NOTHING



DOOR # 2  
WAIT FOR  
THE  
CORPS



DOOR # 3  
WORK TOGETHER  
TO CREATE A  
SUSTAINABLE  
FALSE RIVER FOR  
ALL





Photo by: Andy Crawford,  
Louisiana Sportsman (2/8/2010)

<http://www.interactiveangler.com/lakes.php?l=1043>

# Results: An Improved and Sustainable False River For All!



<http://media.225batonrouge.com/>



<http://theadvocate.com/>



<http://www.crappie.com/>







## False River Ecosystem Restoration Information:

<http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=924>

Suggestions for Improvement:

Email: [FalseRiver@LA.GOV](mailto:FalseRiver@LA.GOV)